# Advanced Vial Closure System (AVCS) Technology



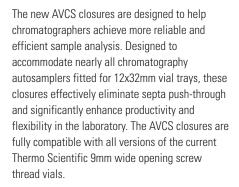
### Innovative Closure Technology. Unmatched performance

## Thermo Scientific National and Chromacol Wide Opening 9mm Screw Thread Closures

Features of 9mm Wide Opening, Integral Membrane and Solid Top Closures:

- · Nearly eliminates septa push through due to AVCS technology
- · Increased sealing capability
- Unlimited options in selecting the best septum for your instrument and applications
- Cost efficient alternative to bonded septa for resolving push through
- · Optimized ergonomics, fine texturing and evenly space ribbing for handling even with poorly fitting gloves
- Rough edges have been eliminated making it easier and more comfortable to use while improving autosampler operation

Understanding what drives your laboratory helps Thermo Fisher Scientific deliver products that exceed your expectations. The Thermo Scientific™ National Target DP™ 9mm C5000 series and the Thermo Scientific™ Chromacol™ K-Series vial closure systems are innovative, flexible and performance driven products built on the Advanced Vial Closure System (AVCS) technology platform.



#### 9mm Wide Opening Closures

A wide opening vial deserves a wide opening cap closure. Utilizing AVCS technology, the AVCS wide opening closure increases the available injection area by over 7%, providing greater area for injection needle penetration. Previously available solutions for resolving septa push through sent most laboratories to a more expensive yet less flexible choice of closure. The C5000 and K-Series delivers the flexibility to choose the septum best suited for the analysis — as well as for LC-MS and GC-MS applications.

#### 9mm Integral Membrane Closure

With the AVCS technology design aspects of the open top cap built-in, the integral membrane closure provides a halogen and rubber-free sample handling environment for HPLC applications or applications where silicones or rubber septa are not suitable. This cap benefits from the improved septa sealing and ergonomic improvements while still delivering a value option closure system. Strict control of the membrane qualities makes this the first membrane closure with broad chemical compatibility, low background extractables, compatibility with most HPLC autosamplers, and excellent piercing characteristics.

#### **9mm Solid Top Closure**

The solid top closure also benefits from the AVCS technology by providing maximum protection of samples during long term storage. The protective top provides additional support and prevents accidental puncture of the septum and resulting sample loss. Ergonomic innovation is the key to this product, ensuring that comfort and ease of use have not been overlooked. We also understand that samples may be stored at very cold temperatures and have tested our solid-top caps down to -80°C.









View product information and application notes